

# Solar Photovoltaic Plan Review Process

- Submitted Projects
- Master Plan Projects
- Complying Template Projects



# Solar Photovoltaic Plan Review Process

- Submitted Projects
  - Roof Mounted
  - Ground Mounted
  - New Structure Mounted



# Solar Photovoltaic Plan Review Process

- Master Plans
  - Initial Review
  - Subsequent Projects



# Solar Photovoltaic Plan Review Process

- Complying Template Projects
  - Roof Mounted SFD





# DSD Residential Plan Template for Solar Photovoltaic

- The Purpose is to reduce plan review time by:
  - Establishing a standard format and layout
  - Suggesting standard notes



## •Residential PV Template

## General Project Information

**Notes for each page on the right-hand side of the page**

**Plans need to be in a simple legible format  
(11" X 17")**

[illegible]

# •Residential PV Template

[illegible]

**PV Company Name  
& Logo**

**Designer Name**

**Signature**

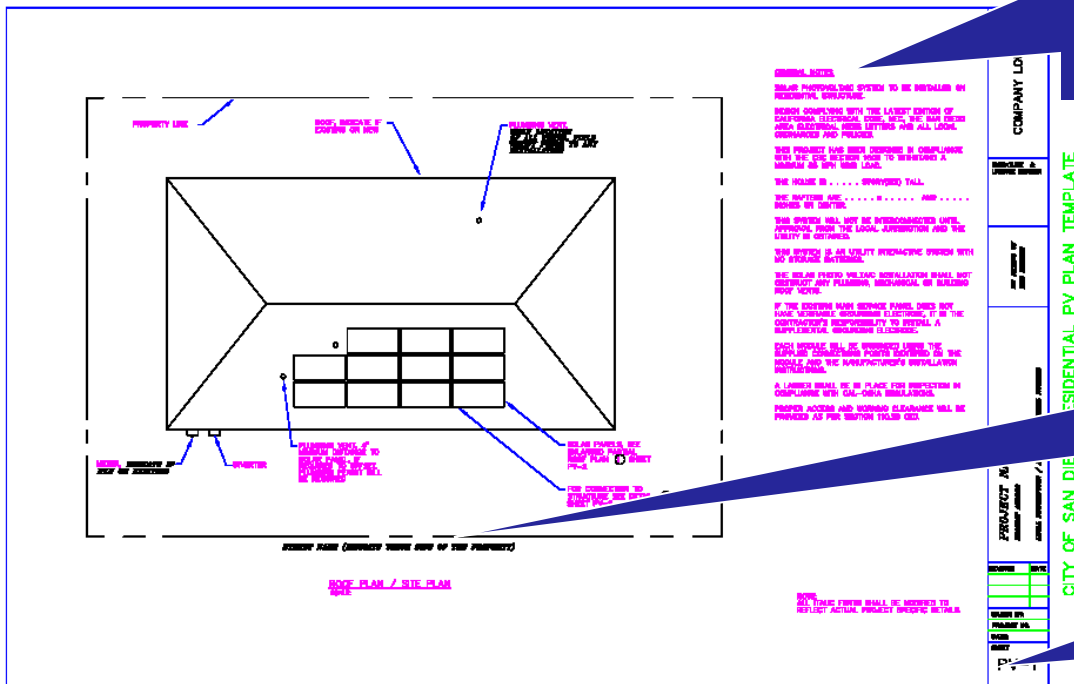
**License #**

## Project Location



# Development Services Department Division of Building, Construction and Safety

## •Residential PV Template



The diagram shows a house with a solar panel array on the roof. Labels include: PROPERTY LINE, ROOF BREAKS IF COVERED OR NOT, DRAINAGE, PV PANELS, ELECTRICAL SERVICE, and PV SYSTEM. The form includes sections for: GENERAL NOTES, COMPANY LOG, PROJECT NO., and CITY OF SAN DIEGO. The notes section contains detailed instructions for the installer, including requirements for the latest edition of the National Electrical Code, compliance with local laws, and the use of a licensed electrician. The form also includes a section for the installer's signature and date.

**GENERAL NOTES:**  
SOLAR PHOTOVOLTAIC SYSTEMS TO BE INSTALLED ON RESIDENTIAL STRUCTURES.  
SOLAR COMPLIANCE WITH THE LATEST EDITION OF NATIONAL ELECTRICAL CODE AND THE SAN DIEGO AREA ELECTRICAL CODE LETTERS AND ALL LOCAL ORDINANCES AND RULES.  
SOLAR PHOTOVOLTAIC SYSTEMS IN COMPLIANCE WITH THE CITY OF SAN DIEGO'S REQUIREMENTS FOR A MINIMUM OF 10% SOLAR LOAD.  
THE HOUSE IS . . . . . SPANDED TALL.  
THE SYSTEM IS . . . . . AND . . . . . AND . . . . . AND . . . . .  
THE SYSTEM WILL NOT BE INTERCONNECTED WITH ANY OTHER SYSTEMS.  
THE SYSTEM IS AN UL-1741 INTERCONNECTED SYSTEM WITH NO STORAGE SYSTEMS.  
THE SOLAR PHOTOVOLTAIC INSTALLATION SHALL NOT CONFLICT WITH PLUMBING, MECHANICAL, OR BUILDING CODES.  
IF THE EXISTING MAIN SERVICE PANEL DOES NOT HAVE WORKABLE GROUNDING ELECTRICAL, IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL A SUPPLEMENTAL GROUNDING (LIGANDS).  
SOLAR PHOTOVOLTAIC SYSTEMS SHALL BE INSTALLED IN COMPLIANCE WITH THE CITY OF SAN DIEGO'S REQUIREMENTS FOR A MINIMUM OF 10% SOLAR LOAD.  
A LICENSE SHALL BE IN PLACE FOR INSTALLATION IN COMPLIANCE WITH CAL-OSHA REGULATIONS.  
PROPER ACCESS AND WORKING CLEARANCE SHALL BE PROVIDED AS PER SECTION TELLER 001.

**COMPANY LOG**

**PROJECT NO.**

**CITY OF SAN DIEGO**

**ROOF PLAN / SITE PLAN**

Notes font large enough to be legible

Identify Property Lines

Page Reference





NOTE:  
ALL ITALIC FONTING SHALL BE MODIFIED TO  
REFLECT ACTUAL PROJECT SPECIFIC DETAILS

PROPERTY LINE

ROOF BREAKS IF EXISTING ON SITE

CLIMBER TREE

WIND BREAKER

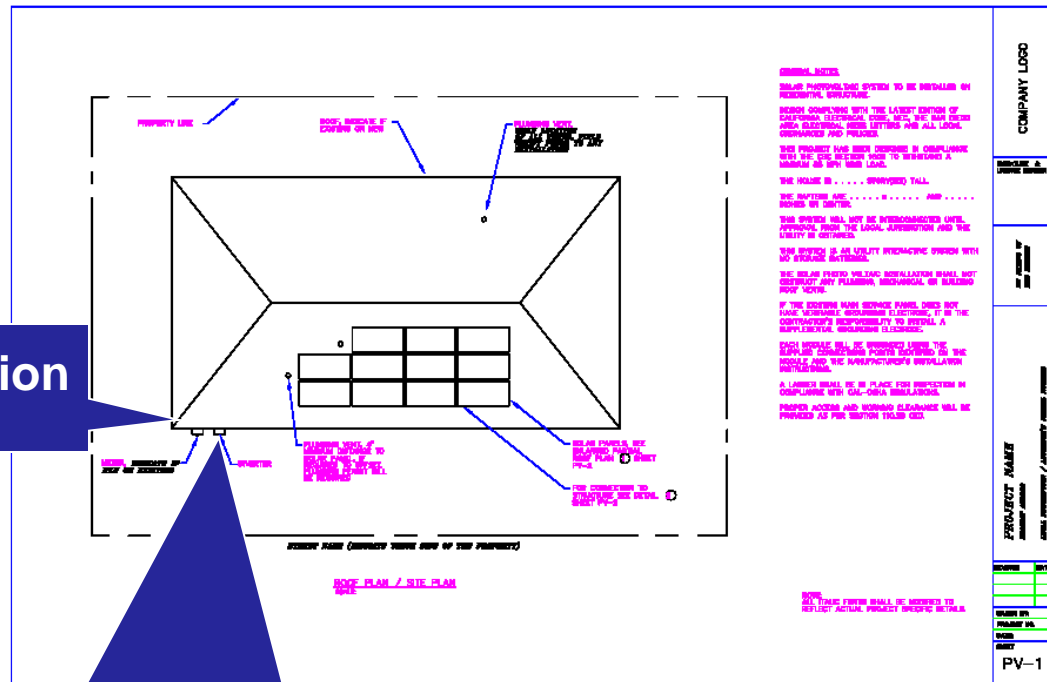
SOLAR PANELS ARE PLACED FROM NORTH TO SOUTH

THE CONNECTION TO STRUCTURE USE METAL SHEET PV-2

EXISTING WALLS TO BE REMOVED TO ALLOW FOR THE PLACEMENT OF SOLAR PANELS

ROOF PLAN / SITE PLAN  
PV-2

## •Residential PV Template



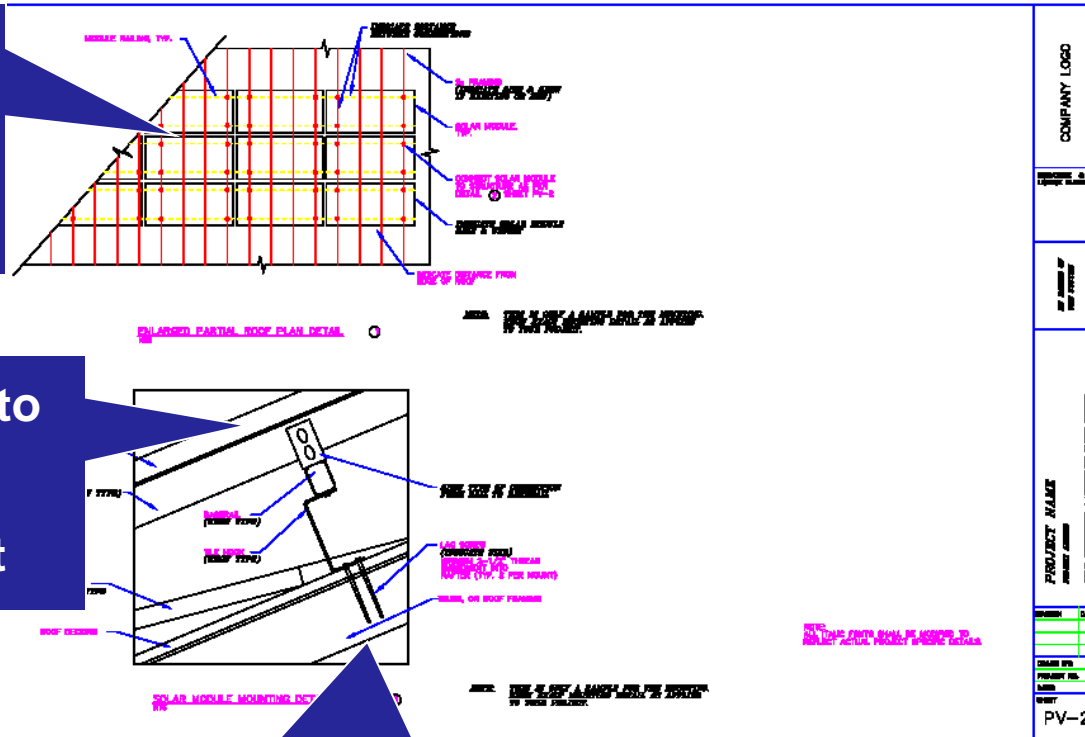
CITY OF SAN DIEGO RESIDENTIAL PV PLAN TEMPLATE

**Structural calculations are required for the roof or structure mounted PV systems if the weight of the PV system exceeds five pounds per square foot.**



# •Residential PV Template

Roof Framing and  
the Rack lay out



Typical Detail to  
show the  
attachment

Provide a Water Proofing Detail



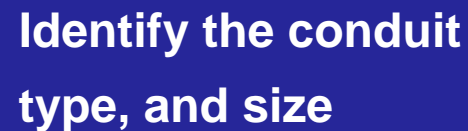


**Show the module  
manufactures' name  
and the model  
number**

**Show the number of  
modules per string  
and the number of  
strings per system**

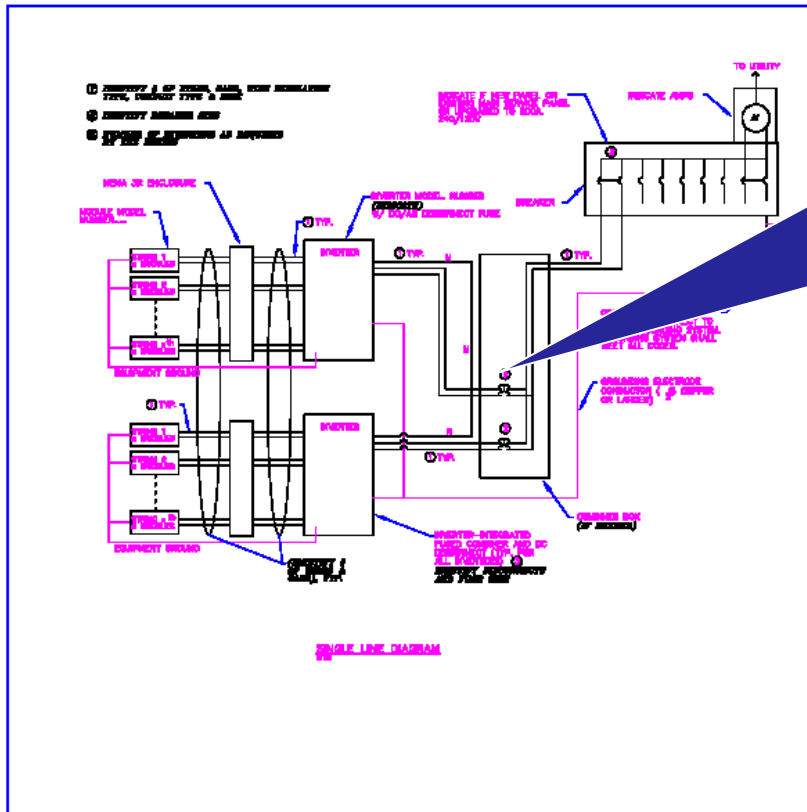


## Identify the wire type, and size





# Residential PV Template Single Line



If a combiner box is used identify the ampere rating of the bus and OCP

**ADDITIONAL ELECTRICAL INFORMATION:**

1. OPERATING CURRENT .....  
 2. OPERATING VOLTAGE .....  
 3. MAXIMUM SYSTEM VOLTAGE .....  
 4. ENERGY STORAGE CAPACITY .....  
 5. OTHER INFORMATION AND THE PROJECT

1. (A) OF INVERTER  
 2. (B) OF INVERTER OF EACH STRING  
 3. MANUFACTURER'S NAME AND THE MODEL NUMBER OF INVERTER  
 4. MANUFACTURER'S NAME AND THE MODEL NUMBER OF THE INVERTER  
 5. INVERTER BOX AMPERE RATING  
 6. INVERTER BOX AMPERE RATING  
 7. PV ARRAY-BOX BREAKER AMPERE RATING

**PROJECT NAME**

**PROJECT ADDRESS**

**CITY**

**STATE**

**ZIP**

**DATE**

**BY**

**REV**

**PV-3**

CITY OF SAN DIEGO RESIDENTIAL PV



## Identify the ampere rating of the bus, main breaker and back-fed PV breaker





## RESIDENTIAL PV PL

**Identify DC and AC disconnects and where fuses are required show the ampere rating of the fuses**



## Residential PV Template – Manufacturer Information Sheets

**Include 8.5” by 11”  
copies of the  
Manufacturer’s  
specifications**

**Verify that all  
components are  
listed by a Nationally  
Recognized Testing  
Laboratory for the  
intended use.**



